DIGIPLEX SPECTRA EVO

Printer Module V1.1
APR-PRT3

P A R A D O X®
S E C U R I T Y   S Y S T E M S
Printed in Canada 06/2007   paradox.com   APRPRT3-EI00

Introduction

The Printer Module (APR-PRT3) provides the ability to automatically print live or stored events.

Sample Printout:
2007/06/12 07:17 Partition 1 Arming with master   John Doe
2007/06/12 18:09 Partition 1 Disarming with master John Doe

Home Automation Interface Capabilities

When used with an EVO Series or DGP-848 (V4.11 or higher) control panel, the Printer Module can also be used as an interface between a home automation system and your control panel. For information on this feature and its related programming sections, refer to the *ASCII Protocol Programming Instructions* and/or *C-Bus Programming Instructions* available on our website at paradox.com.

Technical Specifications

Parallel Port:	Minimum 80 column printer
Serial Port:	1 start bit, 8 data bit, no parity and 1 stop bit (8N1)
Input Voltage:	9-16 Vdc
Current Consumption:	60mA maximum
Serial Port Baud Rates:	2400, 9600, 19200 or 57600 bps
Event Buffer:	2048 events
Compatibility:	EVO48, EVO96, EVO192*, DGP-848 or DGP-NE96 control panel
	Spectra 1728 or 1738 control panel (V2.0 or higher)
	APR-PRT3 can be used to replace a APR3-PRT1

*When using the APR-PRT3 with the EVO192, the first 96 zones will be recognized.

Printer Requirements

Dot matrix, inkjet or laser printers can be connected through one of your computer's COM ports to the Printer Module's serial port. Events can be displayed and printed using communication software like **Procomm™**, **Telix©** and **HyperTerminal®**.
It is recommended that only dot matrix printers that support a minimum of 80 columns be connected directly to the Printer Module. Only dot matrix printers can print individual events in real time.

LED Feedback

Panel Bus

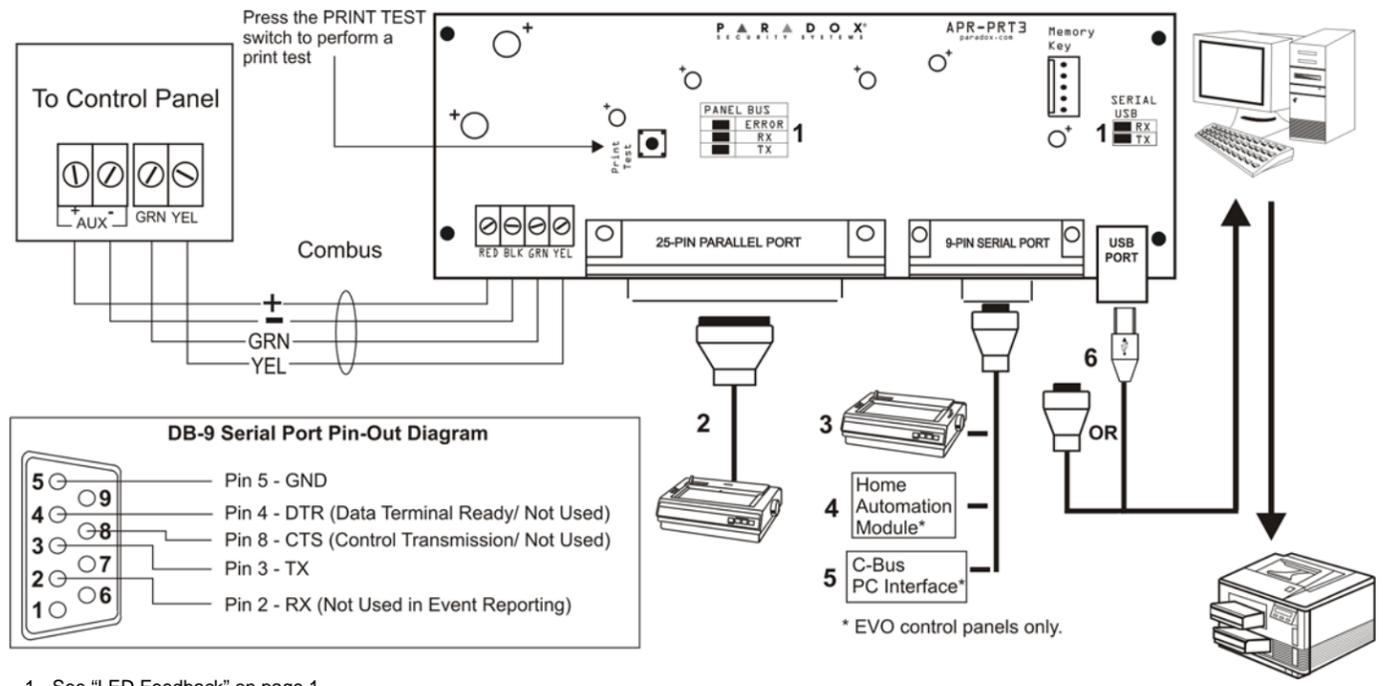| ERROR:	RX:	TX:	Condition:
ON	OFF	OFF	Combus shorted (GND or VCC / No clock / No data
ON	OFF	ON	Wrong data / Invalid combus address (Too many modules)
ON	ON	OFF	Reserved for future use
ON	ON	ON	Combus lines are reversed (Clock in Green / Data in Yellow)
FLASH	OFF	OFF	Low power

Serial Bus

LED:	Condition:
RX	Printer module is receiving information
TX	Printer module is sending information

Entering EVO Programming
1. Hold **[0]** key + **[INSTALLER CODE]**
2. Enter section **[953]** (DGP-848) **[4003]** (EVO)
3. Enter module's 8-digit **[SERIAL NUMBER]**
4. Enter **[SECTION]** and enter the required **[DATA]**

Entering Spectra Programming
1. Press the **[ENTER]** key
2. Enter the **[INSTALLER CODE]**
3. Enter 3-digit **[SECTION]** you wish to program
4. Enter the required **[DATA]**

EVO Sections	Spectra Sections	
[001]	**[550]**	**Partition Assignment** Digiplex - Options **[1]** to **[8]** Spectra - Options **[1]** to **[2]**
[002] to **[013]**	**[551]** to **[552]**	**Automatic Printing of Zone Status** Each section represents 8 zones i.e. [002] = zones 1~8, [013] = zones 89~96. The Printer Module must be assigned to the same partition as the zone.
[014]	**[550]**	**Automatic Printing of Event Groups** **EVO** **[1]** Miscellaneous Events * **[2]** Arming/Disarming Events **[3]** Alarm and Alarm Restore Events **[4]** Tamper and Tamper Restore Events **[5]** Trouble and Trouble Restore Events **[6]** Special Events** **[7]** Access Events *** * Fire Reset, Contact Module Access, Remote Access, PC Fail To Com, User Code Entered, Bypass Programmed, Delay before Transmitting and Utility Key Pressed ** Cold Start, Warm Start, Test Reports, WinLoad Login/Logout, Installer In/Out *** Access Granted/Denied, Request For Exit, Door Left Open Alarm, Door Left Open Restore, Door Forced Alarm, Door Forced Restore **Spectra** **[4]** Arming/Disarming Events **[5]** Alarm & Alarm Restore Events **[6]** Tamper & Tamper Restore Events **[7]** Trouble & Trouble Restore Events **[8]** Special Events† (see below for Special Events) † **[PG]** & **[FNC1]** keys pressed, Button Pressed on Remote, Bypass Programming, User Activated PGM, Breaching Zone with Delay and System Power Up.
[015]	**[553]**	**Enable Parallel Port** EVO -Option **[1]** Spectra -Option **[4]**
[015]	**[553]**	**Printer Status Mask Options** **EVO Spectra** **[3] [5]** Off-Line Status Mask **[4] [6]** Paper-Empty Status Mask **[5] [7]** Printer Fault Status Mask **[6] [8]** Printer Busy Status Mask ⚠ If the Printer Status Mask Options are ignored, printer troubles will not be displayed. These options apply only to the parallel port.
N/A	**[557]**	**Setting the Date (Spectra)** After a power failure, the date must be reprogrammed.
N/A	**[280]**	**Setting the Time (Spectra)** After a power failure, the time must be reprogrammed.

EVO Sections	Spectra Sections	
[016]	**[553]**	**Enable Serial Port** Option **[1]** The Printer Module can use the HyperTerminal® communication program that comes installed with Windows®. Using HyperTerminal®, the Printer Module will display events as they occur on your computer's monitor. 1. Click **Start** (from the Windows® taskbar) ⇨ **Programs** ⇨ **Accessories** ⇨ **Communications** ⇨ **HyperTerminal®**. The **Connection Description** window is displayed. 2. Enter a name in the **Name** text box and select an icon for your connection file. Click **OK**. The **Connect To** window is displayed. 3. From the **Connect Using** drop-down list select the **COM** port connected to the Printer Module. Click **OK**. The **COM Properties** window is displayed. 4. Click on the **Bits per second** drop-down list and select the baud rate that is set in the Printer Module (Section [016] Options **[2]** & **[3]**). By default, HyperTerminal® sets the **Data bits** at **8**, the **Parity** at **None** and the **Stop bits** at **1**. Click **OK**. 5. The HyperTerminal® display will appear already connected to the Printer Module. Click on the **Properties** icon (or select **Properties** from the **File** menu). The communication file's Properties window is displayed. Click the **Settings** tab. Under **Emulation**, verify that it is set as **Auto Detect**. If not, select **Auto Detect** from the drop-down list. Click **OK**.
[016]	**[553]**	**Baud Settings** Option **[2] [3]** Both the Printer Module and serial port should have the same baud rate. Refer to the printer's instruction manual for the correct baud rate. <table><tr><td colspan="3">Baud Rate Settings</td></tr><tr><td>[2]</td><td>[3]</td><td></td></tr><tr><td>OFF</td><td>OFF</td><td>— 2400 Baud</td></tr><tr><td>ON</td><td>OFF</td><td>— 9600 Baud</td></tr><tr><td>OFF</td><td>ON</td><td>— 19200 Baud</td></tr><tr><td>ON</td><td>ON</td><td>— 57600 Baud</td></tr></table>
[016]	N/A	**Serial Port Usage** Option **[4]** Set the Printer Module's serial port usage to either Event Reporting (off) or Home Automation (on). ☞ For information on using the Printer Module as an interface for a home automation system, refer to the *ASCII Protocol Programming Instructions* and/or *C-Bus Programming Instructions* available on our website at paradox.com.
[027] to **[058]**	N/A	**Manual Event Group Printing** The event groups are represented by the following sections:

	Event Group	Feature Group	Start #	End #
Miscellaneous Events	**[027]**	**[028]**	**[029]**	**[030]**
Arming/Disarming Events	**[031]**	**[032]**	**[033]**	**[034]**
Alarm/Alarm Restore Events	**[035]**	**[036]**	**[037]**	**[038]**
Tamper/Tamper Restore Events	**[039]**	**[040]**	**[041]**	**[042]**
Trouble/Trouble Restore Events	**[043]**	**[044]**	**[045]**	**[046]**
Special Events	**[047]**	**[048]**	**[049]**	**[050]**
Access Events	**[051]**	**[052]**	**[053]**	**[054]**
All Events	**[055]**	**[056]**	**[057]**	**[058]**

Each group of sections from **[027]** to **[058]** represents event groups that can be printed when a specified action from the PGM Programming Table occurs (see the control panel's programming guide*)*.
⚠ Event Groups 000 to 055 can be used to program the Printer Module's Manual Printing feature. Event groups 062 and 063 can only be used when using an EVO control panel.

EVO Sections	Spectra Sections	
[080] and **[090]**	**[902]** and **[900]**	**Paradox Memory Key** (NOT TO BE USED WITH UL LISTED SYSTEMS) The Paradox Memory Key can copy the programmed contents of one APR-PRT3 into as many others as needed. For more information, see the control panel's programming guide. **EVO Spectra** **[090] [902]** = Copy to Memory Key **[080] [900]** = Paste to APR-PRT3 When the APR-PRT3 emits a confirmation beep, wait for a second confirmation beep and then remove the Memory Key.

DB-9 Serial Port Pin-Out Diagram

- Pin 5 - GND
- Pin 4 - DTR (Data Terminal Ready/ Not Used)
- Pin 8 - CTS (Control Transmission/ Not Used)
- Pin 3 - TX
- Pin 2 - RX (Not Used in Event Reporting)

* EVO control panels only.

1. See "LED Feedback" on page 1

2. 25-Pin Parallel Port: Connect the Printer Module's 25-pin parallel port to any dot matrix printer.
   Note: The dot matrix printer must support a minimum of 80 columns.

3. 9-Pin Serial Port: Connect the Printer Module's 9-Pin serial port to a dot matrix printer.
   Note: The dot matrix printer must support a minimum of 80 columns.

4. 9-pin Serial Port: Connect the Printer Module's 9-pin serial port to a home automation module.

5. 9-pin Serial Port: Connect C-Bus to the Printer Module using a ***null modem cable***.

6. 9-pin Serial Port: Connect either the Printer Module's USB or 9-pin serial port to a computer's COM port to view the control panel's events on the computer's monitor. The events display on the monitor can then be printed through the printer connected to the computer.

⚠ Remove AC power and battery before adding a module to the system. Please refer to the control panel's Reference & Installation Manual for the maximum allowable installation distance.
Only one APR-PRT3 can be connected per Spectra control panel.

📌 Printer cable length must not exceed 25ft.

Warranty